



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/658,734	09/09/2003	Ed H. Frank	14183US02	2791
23446 7590 05/24/2007 MCANDREWS HELD & MALLOY, LTD 500 WEST MADISON STREET SUITE 3400 CHICAGO, IL 60661			EXAMINER GOETZE, SIMON A	
			ART UNIT 2617	PAPER NUMBER
			MAIL DATE 05/24/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/658,734	Applicant(s) FRANK ET AL.	
	Examiner Simon A. Goetze	Art Unit 2617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 March 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-22 and 24-26 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 and 24-26 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 September 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This action is in response to Applicant's amendment filed on March 6, 2007. Claims 1-22 and 24-26 are now pending. Claim 23 has been cancelled.

Response to Arguments

2. Applicant's arguments with respect to **claims 1-26** have been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. **Claims 24 and 26** are rejected because they claim dependency from claim 23, which has been cancelled in the instant application. For the purposes of this examination they have been examined as depending from claim 17. Appropriate correction is required.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2617

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. **Claims 1-26** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Haddad (US Patent Application Publication 2003/0133420)** in view of **Neumiller et al. (US Patent 6,341,222)**.

Consider **claims 1, 9, and 17**, Haddad discloses a method, machine-readable storage having stored thereon a computer program, and a system for providing load balancing in a hybrid wired/wireless local area network (*Abstract; Page 2, Paragraphs 0002-0004*), the method comprising:

Art Unit: 2617

receiving at least one polling message from an access device by at least one of a plurality of access points (*when a connection request is made, communications controller 13 checks the load on the nodes – Page 1, Paragraph 0008; Page 3, Paragraphs 0035 and 0040*);

responsive to said at least one polling message, determining a load on each one of said plurality of access points (*when a connection request is made, communications controller 13 checks the load on the nodes – Page 1, Paragraph 0008; Page 3, Paragraphs 0035 and 0040*); and

sending said determined load of said each one of said plurality of access points to said network device (*the controller uses the determined value to determine the load – Page 3, Paragraphs 0035 and 0040*).

However, Haddad discloses that the load balancing procedure performed by the access device receives load information about an access point by measuring the quantity of data addressed to it and received from it. Neumiller et al. discloses that the a request for the load is made and load information is sent to the access device in order to determine the most appropriate access point (*Figures 4 and 5 – Abstract; Column 5, Lines 9-30 and 51-67; Column 6, Lines 1-4 and 17-30*).

It would have been obvious to a person having ordinary skill in the art at the time the invention was made to incorporate the teachings of Neumiller et al. with those of Haddad because this allows for the access device to aid in the decision of the appropriate access point, making the decision more efficient and reliable.

Consider **claims 2, 10, and 18**, as applied to above, Haddad as modified by Neumiller et al. further discloses interpreting said at least one polling message by at least one of said plurality

Art Unit: 2617

of access points, which is located in operating range of said access device (*Neumiller et al.* – *Column 5, Lines 51-67; Column 6, Lines 1-4 and 17-30*).

Consider **claims 3, 11, and 19**, as applied to above, Haddad as modified by Neumiller et al. further discloses selecting an access point from said plurality of access points having a least load (*Neumiller et al.* – *select data transmission from the most desirable access point* – *Column 5, Lines 51-67; Column 6, Lines 1-4 and 17-30*).

Consider **claims 4, 12, and 20**, as applied above, Haddad as modified by Neumiller et al. further discloses selecting said access point having a least load by said access device to provide service (*Neumiller et al.* – *select data transmission from the most desirable access point* – *Column 5, Lines 51-67; Column 6, Lines 1-4 and 17-30*).

Consider **claims 5, 13, and 21-22**, as applied above, Haddad as modified by Neumiller et al. further discloses sending said received at least one polling message from said at least one of a plurality of access points to a switch using a messaging protocol message (*the node sends the request to the controller 13 which serves as a switch to the network* – *Page 2, Paragraph 0029; Page 3, Paragraphs 0035 and 0040*); and

receiving said at least one polling message by said switch (*the node sends the request to the controller 13 which serves as a switch to the network* – *Page 2, Paragraph 0029; Page 3, Paragraphs 0035 and 0040*).

Consider **claims 6 and 14**, as applied above, Haddad as modified by Neumiller et al. further discloses determining at least a load on at least of portion of said plurality of access points (*the load of the nodes is determined* – *Page 3, Paragraphs 0035 and 0040*).

Art Unit: 2617

Consider **claims 7 and 15**, as applied above, Haddad as modified by Neumiller et al. further discloses sending information corresponding to said determined load to at least a portion of said plurality of access points using a messaging protocol message (*a general command is issued through the nodes to the connected devices – Page 3, Paragraph 0037*).

Consider **claims 8 and 16**, as applied above, Haddad as modified by Neumiller et al. further discloses redistributing a load on said at least a portion of said plurality of access points (*the load is redistributed by transferring access terminals to other nodes – Page 3, Paragraph 0037*).

Consider **claim 24**, as applied to claim 17 above, Haddad as modified by Neumiller et al. further discloses sending information corresponding to said determined load to at least a portion of said plurality of access points using a messaging protocol message (*a general command is issued through the nodes to the connected devices – Page 3, Paragraph 0037*).

Consider **claim 25**, as applied to claim 24 above, Haddad as modified by Neumiller et al. further discloses redistributing a load on said at least a portion of said plurality of access points (*the load is redistributed by transferring access terminals to other nodes – Page 3, Paragraph 0037*).

Consider **claim 26**, as applied to claim 23 above, Haddad as modified by Neumiller further discloses at least one controller is a bandwidth management controller, a quality of service controller, a load balancing controller, a session controller and a network management controller (*the communications controller 13 performs bandwidth management, QOS services, load balancing, session control, and network management – Page 2, Paragraph 0029; Page 3, Paragraphs 0035, 0037, and 0040*).

Conclusion

9. Any response to this Office Action should be **faxed to (571) 273-8300 or mailed to:**

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Hand-delivered responses should be brought to

Customer Service Window
Randolph Building
401 Dulany Street
Alexandria, VA 22314

10. Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Simon A. Goetze whose telephone number is (571) 270-1113. The Examiner can normally be reached on Monday-Thursday from 7:30am to 5:00pm and Friday from 7:30am to 4:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Nick Corsaro can be reached on (571) 272-7876. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR

Art Unit: 2617

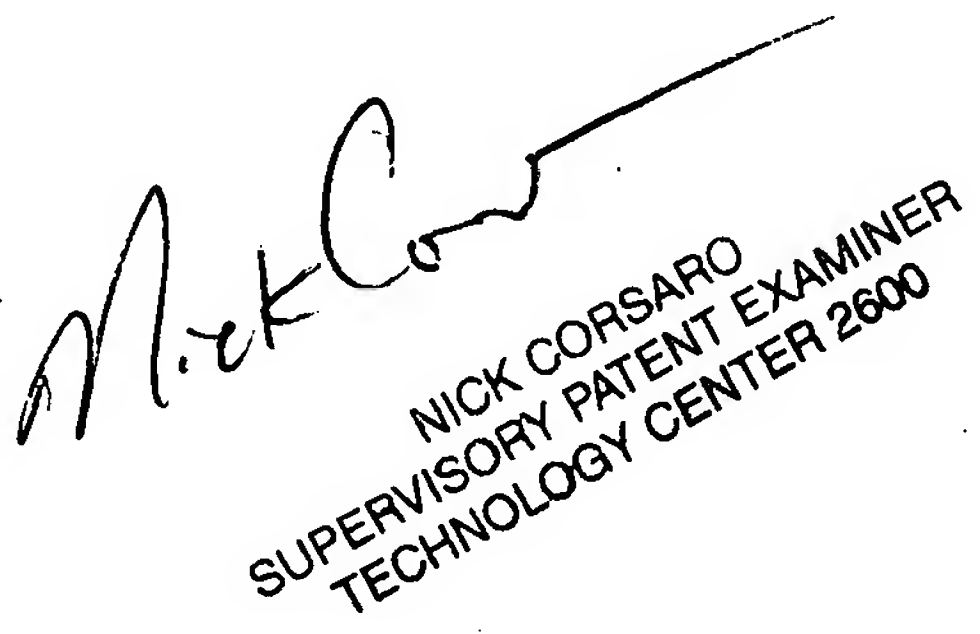
system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.



Simon A. Goetze
S.A.G./sag

May 16, 2007



NICK CORSARO
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600